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Memorandum

Date: **October 20, 2003**
To: **Christine Baker, Executive Officer, CHSWC**
cc:
From: **Frank Neuhauser**
Re: **Outline: Estimating the range of savings from introduction of guidelines including ACOEM (revised)**

Summary:

This memorandum estimates a probable range of impact of the utilization guideline component of Senate Bill (SB) 228. The following table gives the low, medium and high estimate of the total dollar impact and the estimate of the percentage change on that portion of medical costs that would be affected by utilization guidelines.

Range	Total affected dollars	Impact of utilization guidelines	Total savings
Low	$8.4 billion	16.2%	$1.4 billion
Middle	$8.4 billion	36.7%	$3.1 billion
High	$8.4 billion	53.4%	$4.5 billion

Below, we describe each step in the estimation and cite supporting material for the range of estimates given.

I received enormous assistance on the project from a number of people. In particular, Judge Mark Kahn offered extensive analysis of the probable impact of the legislation on the action of Workers' Compensation Appeals Board (WCAB) judges. His comments are included below. Dave Bellusci of the Workers' Compensation Insurance Rating Bureau (WCIRB) generously shared a summary of the process for building into the ratemaking process for 2004 the impact of repeal of primary treating physician presumption (PTP) under AB-749. His comments are also shared below. Alex Swedlow of the California Workers' Compensation Institute (CWCI) kindly offered assistance identifying sources of research on the impact of utilization guidelines. And as always, Christine Baker and the Commission on Health and Safety and Workers' Compensation (CHSWC) staff, particularly Irina Nemirovsky, were especially helpful. However, in the end, all of the calculations and interpretations are mine and I take full responsibility for any errors, factual or interpretive.

Outline of estimation steps:
The estimation will involve the following steps. We start with total incurred medical (100%) which is estimated at $13.8 billion for 2004. Then we examine the portion of this total that is likely to be affected by the impact of the legislation concerning the use of guidelines in California workers' compensation (SB-228). The steps are:

1. Estimate the fraction of the total incurred medical that can be attributed to the differential between workers' compensation and group health.

2. Estimate the fraction of this differential that can be attributed to over-utilization.

3. Estimate the fraction of the over-utilization that is likely to be controlled by application of utilization guidelines under normal conditions.

4. Estimate the strength of the legislation, especially as it concerns the application of the utilization guidelines by the courts.

5. Estimate how much should be considered as already controlled by the limits on physical therapy and chiropractic treatment that is part of the recent legislation.

6. Estimate how much of any effect has already been accomplished through actions related to AB-749 and the repeal of primary treating physician (PTP) presumption.

7. Finally, estimate how much of any effect is likely to be lost in the initial year (2004) incurred costs through delays in implementation and dissemination of guidelines and incomplete coverage of guidelines in the initial period.

Starting with 100% of medical costs, each step can be seen as a fraction of the remaining medical costs. For example, if the differential (step 1) is 50% of incurred medical and the fraction of this that is attributed to over-utilization (step 2) is 50%, then 25% of medical costs remain at the start of step 3.

The use of this approach will allow alternative estimations of one or more steps to be clearly stated and final estimates to be comparable. This should allow for more transparent and clear discussions between participants.

Step 1: The differential between workers' compensation and group health
The evidence for higher medical costs in workers' compensation relative to group health is consistently strong. All of the studies reviewed indicate a substantial positive differential for workers' compensation medical care. The studies find that workers compensation pays 33%-300% more than group health to treat the same conditions. The estimate of the differential depends on a number of factors including, jurisdiction studied, timing of the study, type of injury or illness, and the particular analytic method used.

The first of these studies was conducted by Zaidman (1990) on data covering Minnesota claims occurring in 1987-89. Zaidman found that for the same condition, workers' compensation paid, on average, 104% more than group health fee-for-service. A weakness of Zaidman's approach was that the comparison was limited by the data to comparing charged amounts rather than paid amounts. The paid to charge amounts in workers' compensation that were available to the author were quite close to 1. Group health generally reimburses at a substantial discount to charged amounts. This led a later study of the same data (Johnson, et. al., 1993), which found similar results, to conclude that the problem "is likely to be worse than what we have described."

Subsequent to Zaidman, the economists Baker and Krueger (1993, 1995) re-examined the Minnesota data and made a more sophisticated analysis of the differences. Their results found a range of estimates of the positive differential for workers' compensation costs of 64%, 87%, and 300%. The latter they felt was likely the result of the preferred, but possibly unstable, re-exponentiation of the natural logarithms used in the analysis. They felt that the highest estimate was implausible.

Durbin, Corro, and Helvacian (1996) analyzed workers' compensation data from four states (Florida, Illinois, Oregon, and Pennsylvania) and from a number of group health insurers covering the same states. In addition, they were able to focus on paid data rather than charge data. After controlling for available differences, they find the positive differential paid by workers' compensation to be 101%-122%. Unadjusted data found the number of service dates was 216% higher and the duration was 397% longer while the cost was 168% higher.

Johnson, Baldwin, and Burton (1996) examined data from the California workers' compensation system and compared the results to those obtained by Zaidman and Baker and Krueger for Minnesota. They found a wide range for the estimated differential depending on the type of injury and analytic approach. Average payments in California workers' compensation ranged from 1.7 times group health for fractures to 4.2 times group health for back pain. After adjusting for available covariates, the range of estimates across different injury/illness categories ranged from 33% to 400%. The authors also found that for each major category, the differential in California was substantially higher than in Minnesota.

Discussion

The majority of these estimates are centered on a range around a 100% differential between workers' compensation and group health. In other words, workers' compensation is twice as costly when treating the same conditions. The endpoints of the studies are that workers compensation pays a differential of 50% to 300%, or about half as much to four times as much.

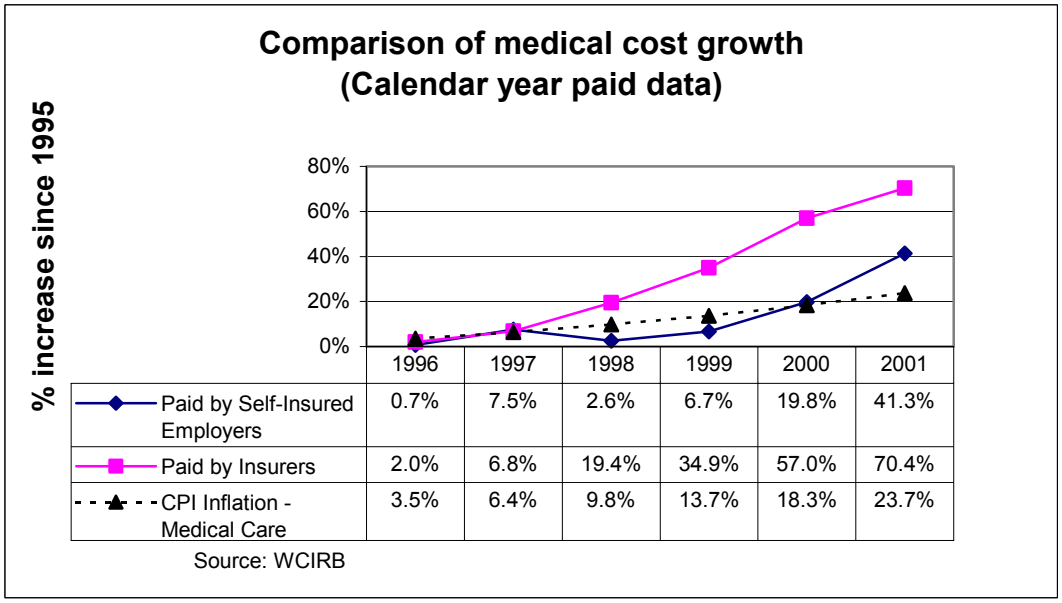
There are several considerations that suggest that these differential estimates are likely to be conservative, especially for California.

- First, all the studies compared workers' compensation to fee-for-service (FFS) group health plans. FFS plans are the most expensive and utilization-intensive type of group health plan. Managed care plans, especially those using capitated payment within health maintenance organizations, are substantially less costly.

This arises for two reasons: (1) because of the nature of the sorting, consumers of greater amounts of health care will tend to choose FFS plans; and (2) FFS plans reduce the incentive for physicians to control utilization of services.

- The comparisons were all made based on data from the late 1980's and early 1990's. Subsequent to this period, there has been an explosion of growth in workers' compensation healthcare costs that has been substantially more rapid than non-occupational medical costs. This can be seen in Chart 1 which compares the growth of California workers' compensation medical costs with national trends. Overall (insured + self-insured), workers' compensation had an average 38% greater medical expenditure growth between 1995 and 2001 than non-occupational health.

Chart 1



- Each study followed claims for a limited period of time. For example, Zaidman followed claims for 15 months. However, workers' compensation medical care is characterized by a distribution of costs and services that is skewed towards long periods after injury. The WCIRB estimates that only 30% of medical costs on claims are paid during the calendar year in which the claims occur and the subsequent calendar year. In addition, the WCIRB has reported that the rapid growth in medical costs on recent claims is concentrated in the later years of the claims. Consequently, following claims only for a limited period during initial treatment very likely biases the estimates of the differential, making them too conservative.

Given (1) the wide range of estimates, (2) the fact that comparisons were to fee-for-service rather than managed care/capitated group health, (3) the clearly higher differential in California over other states, (4) the exceptional growth in occupational health costs relative

to non-occupational medical costs since the time period of the studies, (5) the short observation periods for these studies that miss the long duration character of workers' compensation, and (6) the increasing concentration of medical cost development late in claims, an initial estimate for the differential between California workers' compensation and group health of 150% seems appropriate as a baseline estimate with a range from 100% to 200%. Then the central estimate gives the differential portion of occupational medical costs as 60%. The range is 50% to 66%.

Step 2: What creates the differential, utilization or price?

The early studies of the differential (Zaidman, 1990; Baker and Krueger 1995) attributed the differential to pricing differences. Later studies (Durbin, et. al, 1996; Johnson, et. al., 1996) attributed the majority of the effect to utilization and found little or no price discrimination. Several possible factors exist to explain this inconsistency. First, the late 1980's and early 1990's, the workers' compensation system saw the introduction of more stringent and extensive price controls in the form of fee schedules covering ever-wider ranges of services. California, for example has extended its fee schedule coverage on several occasions, but has not raised its price levels substantially in over a decade.

Second, the earlier studies focused on a single state, Minnesota, and later studies focused on different states, Florida, Pennsylvania, Oregon, Illinois, and California. It is possible that the characteristics of the Minnesota system led to greater utilization control, less price control, or a different set of compensation rules and environment. According to Johnson et. al. (1996) the Minnesota fee schedule covered a much smaller portion of procedures than the California schedule. California in particular has higher-than-average utilization. Table 1 shows the WCRI (2002) comparison of California utilization rates to a group of 12 states.

Table 1

Comparison of California Utilization Patterns vs. 12 State Median			
	California	**12-State Median**	**Difference**
Average visits per claim	29.7	17.4	+71%
Median physician visits	11.6	7.8	+49
Median chiropractic visits	34.1	16.6	+105
Median physical therapists visits	17.0	12.2	+39%
Source: WCRI, 2003.			

Third, the Minnesota study followed claims until 15 months after injury. It is not clear from the Durbin and Johnson studies how long claims were followed after injury. Longer follow-up would have resulted in a greater emphasis on utilization.

Fourth, the substantial increase in managed care and capitated arrangements in non-occupational medical care may have increased the pressure on medical groups to expand income in the only area where fee-for-service arrangements predominate.

Durbin et. Al., attributed the full differential to a utilization effect and found no evidence of price discrimination. Johnson, et. al., attributed 90% of the differential to utilization and the remainder to higher pricing.
What additional evidence is available to estimate the split between price and utilization? Several excellent studies allow us to estimate the price differential in California.

1. Medicare pricing is an important benchmark, first because Medicare represents almost 40% of medical expenditures and second, because it is aggressively controlled by the federal government and tends to be at the low end of pricing.

2. Provider services account for approximately 50% of medical costs (WCIRB (2002)). WCRI (2002) estimated that California's fee schedule reimbursed provider services at 111% of Medicare. The Lewin Group (2002) study for the California Industrial Medical Council (IMC) found provider payments were 110% of Medicare. An update of the Lewin estimate done by UC Berkeley for CHSWC estimated the level at 115% of Medicare. 115% is the best current estimate.

3. Inpatient hospital admissions account for 12% of medical costs. Inpatient hospital admissions, while set at 120% of Medicare, are currently paid at 112% of Medicare in California because they have not been adjusted in four years [Memo to CHSWC by Neuhauser/Swedlow (2003)].

4. Outpatient treatment accounts for 17% of medical costs. A current study underway for CHSWC and California Department of Insurance (CCDI) estimates that California workers' compensation is currently paying approximately 160% of group health.

5. Pharmaceuticals account for 7.2% of medical costs. Neuhauser et. al, (2001b) estimated that California workers' compensation paid 143% of group health.

If we assume that the remaining 16% of medical costs (medical cost-containment, payments made directly to workers, medical-legal, and capitated medical) are paid at the same average premium over group health as the areas for which we have estimates, then across the entire range of services, the average pricing premium of California workers' compensation over Medicare and/or group health is 126%. If we assume the remaining medical costs are paid at group health prices, the average pricing premium of California workers' compensation over group health is 122%.

Then, using the midpoint estimate for the differential (Step 1) of 60%, that leaves a base of 40% that is "normal" utilization at a price ratio relative to group health of 1. Since even the "normal" utilization is priced at a premium, then the baseline due to "normal" utilization and the workers' compensation pricing ranges from 40% * 1.22 = 48.8% to 40% * 1.26 = 50.4%.

Using the midpoint, we get an estimate of the portion of workers' compensation medical cost that is attributable to the impact of over-utilization of 50.4%. The range of estimates is now 37.0% to 59.4%.

Step 3: What is the potential for utilization guidelines to reduce over-utilization?
Utilization guidelines and use of these guidelines to limit inappropriate treatment are not the only mechanisms used by group health to control utilization. There are a number of other processes, such as risk-sharing between insurers and providers, cost sharing between insurers and patients (co-pays and deductibles), and ex-ante contracting between insurers and enrollees (e.g., agreements to limit experimental therapies or adherence to a formulary for pharmaceuticals).[1] Consequently, it is unlikely that adopting and enforcing utilization guidelines will eliminate 100% of the difference between workers' compensation and group health.

A number of studies addressing the impact of utilization guidelines were reviewed to get an estimate of the impact of guidelines. Several issues should be considered in evaluating the estimates in the studies. First, most studies deal with the impact of guidelines as advisory, not mandatory. Generally, guidelines are used to inform physicians about the best approach to treatment. This report will highlight several studies that more closely approximate the legislative impact of SB-228 that gives guidelines a legal presumption component.

Second, studies rarely evaluated the impact of guidelines on reducing over-utilization. Rather, they evaluate the impact of guidelines on utilization without estimating what portion of all utilization is over-utilization.

Third, most of the studies were done in a fee-for-service environment and before the wholesale adoption of managed care options. Consequently, they more closely approximate the current workers' compensation environment.

Finally, an important component of guidelines is often overlooked when focusing on cost, that is, the impact on the quality of health care and patient outcomes. Important savings can accrue to both patients and payors because better treatment leads to shorter duration for temporary disability (TD), improved recovery, and less permanent disability (PD).

Grillo and Lomas (1994) studied the compliance with advisory guidelines meant to improve treatment practice and found very high compliance (50-60%), even in the absence of more specific incentives or enforcement. This suggests that the adoption and dissemination of treatment guidelines specifically for occupational injuries will have a beneficial effect on utilization and treatment regardless of the level of enforcement lent to them by the courts.

[1] A short review of cost-control strategies can be found in Neuhauser, Frank. "Doctors and courts: Do legal decisions affect medical treatment practice?" Report to the Commission on Health and Safety and Workers' Compensation, San Francisco, 2001.

Grimshaw and Russell (1993) did a systematic meta-analysis of studies evaluating the impact of treatment guidelines. Of 59 studies, all but 4 found significant impacts from the adoption and/or dissemination of treatment guidelines in the group health setting. Results varied widely because the guidelines covered a wide range of clinical conditions, treatments, and diagnostic tests. Of the studies, 9 dealt specifically with the impact of guidelines on utilization. Findings revealed that use of head X-rays declined 27% and 51% in two separate studies, hematology requests fell by 20%, albumin use for hypovolaemia declined 40%, radiological exams declined 28% against a control group decline of 2%, preoperative chest X-rays were reduced by 8-16% in one study and 80% in another, and certain contra-indicated cardiac enzyme tests were virtually eliminated.
Grimshaw and Russell also report on 11 studies evaluating patient outcomes and find significant improvements in 9 of the 11, including 58% fewer patients requiring ventilation when admitted through emergency for respiratory problems and 33% fewer early complications in patients admitted to study hospitals. The other studies generally dealt with preventive care and patient compliance rates with long-term treatment and smoking cessation programs.

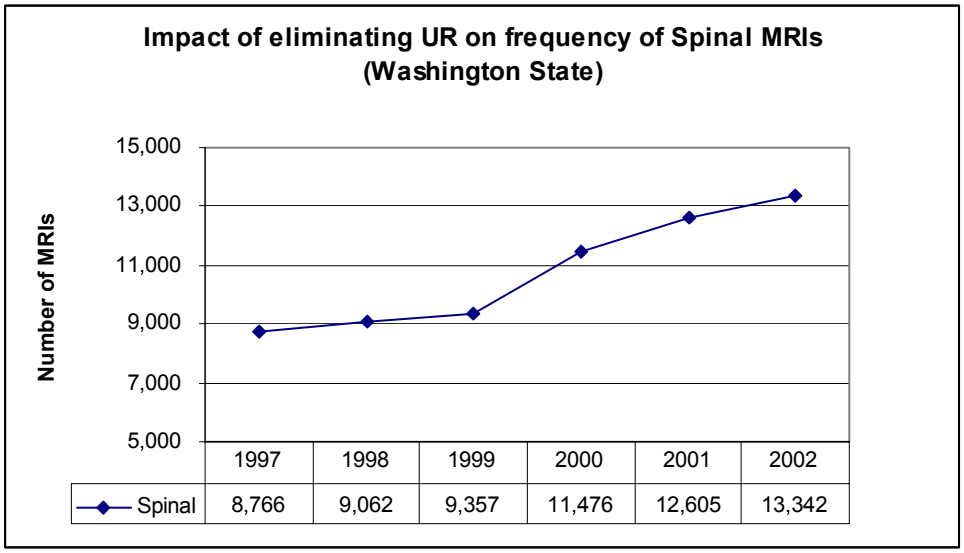
There are several studies that more closely resemble the current issue. Brook et. al., (1976) report on the impact of the establishment of Medicare guidelines restricting the use of antibiotic injections for respiratory infections and tied reimbursement decisions by Medicare to following the guidelines. In this case, injections fell by 60% while similar treatments were unchanged.

Even more appropriate for this discussion, Elam, et. al., (1997) evaluated specifically the introduction of workers' compensation practice guidelines on lumbar-spinal fusion. Washington's Department of Labor and Industry introduced guidelines in 1988 for elective lumbar fusion. Evaluating the rate of lumbar fusion over the period 1987-1992, the authors found a decline of 33% in fusion rates, while non-fusion rates remained constant. Prior to the introduction of guidelines, the rate of fusion operations as a fraction of all lumbar surgeries was higher among the workers' compensation inpatient population than for a similar non-occupational inpatient population. After the introduction of guidelines, the rate declined below that for the non-occupational treatment population. This is particularly important because (1) spinal fusions are very expensive operations, (2) when compared to non-fusion surgery, lumbar fusion is associated with higher rates of complications and longer hospital stays, and (3) Washington state data indicated that 2/3 of fusion surgery patients were totally disabled two years after surgery. Current and future costs were reduced, and injured worker outcomes were likely improved by the introduction of the lumbar-fusion guidelines.

The impact of guidelines is sometimes measured by evaluating the percent of cases that are rejected when submitted for approval. However, this misses probably the most important impact of the adoption and enforcement of treatment protocols, the deterrence from even requesting inappropriate treatment. In 1999, Washington state evaluated the cost effectiveness of utilization review (UR) on MRIs. They estimated that the rejection rate was so low (2%) that the UR cost twice as much as was saved on MRI costs. A decision was made to discontinue UR on MRIs. The following two charts show the responsiveness of utilization to relaxation of review. There is a clear inflection point in the trend on the

number of MRIs that is coincidental with the elimination of UR. The frequency showed an initial jump and also a significant change in trend for both spinal and lower-extremity MRIs. The initial change is equivalent to between 19.4% (spine) and 25.5% (lower extremity) with additional utilization increases due to more rapid growth in subsequent years. The impact on upper-extremity MRIs was less clear. This is probably the strongest evidence of the impact of utilization review and echoes the findings of the CHSWC study on the PTP (Neuhauser, 2001).

Chart 2



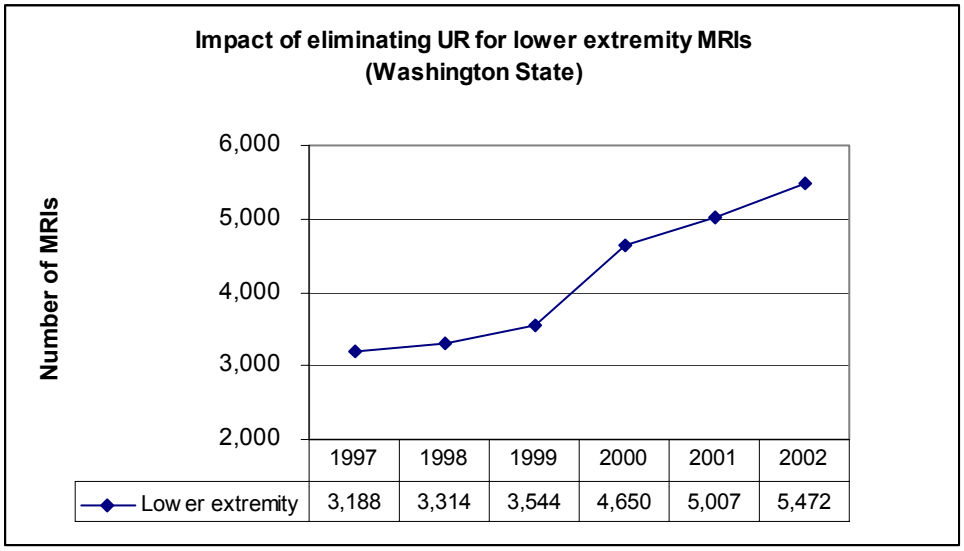


Chart 3

Discussion

The wide range of estimates, the diverse nature of the guidelines, and the measurement of impact against overall treatment rates make it difficult to estimate the impact on over-utilization within workers' compensation. Specifically, we would like to estimate the

portion of the differential represented by over-utilization, estimated above, that will be reduced by the introduction of guidelines.

Using the three most appropriate studies (the results for the other studies are comparable), we have potential reductions of 60%, 33%, and 16%-20%. The later estimates, for the relaxation of UR, would be conservative in that they retain the educational and advisory effect of guidelines while removing only the obvious enforcement effect. A central estimate around 35-40% would be consistent with these studies.
This estimate would then have to be considered against the estimated portion of treatment that is over-utilization. For California workers' compensation, we estimated a range of 37.0% to 59.4%. This suggests potential reductions in over-utilization of 65%-90% with a midpoint estimate of 78.6%. If we widen the lower bound to 50% to be more conservative while retaining the midpoint and upper bound, we get the following estimate of the impact after step 3. The midpoint estimate is 39.6% (50.4% * 78.6%) and a range of 19.0% to 53.3%,

Step 4: Estimating the strength of the legislation
The following analysis of the potential impact of the utilization guideline legislation on legal decisions at the WCAB was prepared by Judge Mark Kahn.

Labor Code §4604.5, adopted as part of SB-228 in the Workers' Compensation Reform Act of 2003, provides for a medical-treatment utilization schedule pursuant to Labor Code §5307.27.

Labor Code §5307.27 provides that on or before December 1, 2004, the Administrative Director, in consultation with the Commission on Health and Safety and Workers' Compensation, shall adopt, after public hearings, a medical treatment utilization schedule, that shall incorporate the evidenced-base, peer-reviewed, nationally recognized standards of care recommended by the commission pursuant to Section 77.5, and that shall address, at a minimum, the frequency, the duration, intensity, and appropriateness of all treatment procedures and modalities commonly performed in workers' compensation cases.

Labor Code §4604.5(a) provides that upon adoption by the Administrative Director of a medical-treatment utilization schedule pursuant to Section 5307.27, the recommended guidelines set forth in the schedule shall be presumptively correct on the issue of extent and scope of medical treatment. The presumption is rebuttable and may be controverted by a preponderance of the evidence establishing that a variance from the guidelines is reasonably required to cure and relieve the employee from the effects of his or her injury.

The Section further provides in subsection (c) that until the Administrative Director guidelines are adopted three months after the publication date of the updated American College of Occupational Environmental Medicine (ACOEM) Occupational Medical Practice Guidelines, these guidelines shall be presumed correct on the issue of extent and scope of medical treatment. The presumption is rebuttable and may be controverted by a preponderance of the evidence establishing that a variance of the guidelines is reasonably required to cure and relieve the employee from the effects of his or her injury.

The following is an analysis of how the above Labor Code Sections should be expected to work after their implementation in 2004.

1. The presumption of Labor Code §4604.5 would be a presumption affecting the burden of proof and not a presumption affecting the burden of producing evidence.

Evidence Code Section 605 provides that a presumption affecting the burden of producing evidence is a presumption established to implement no public policy other than to facilitate the determination of a particular action in which the presumption is applied. Evidence Code §604 provides that the effect of a presumption affecting the burden of producing evidence is to require the trier of fact to assume the existence of the presumed fact unless and until evidence is introduced which would support a finding of its non-existence, in which case the trier of fact shall determine the existence or non-existence of the presumed facts from the evidence and without regard to the presumption.

Evidence Code Section 605 provides that a presumption affecting the burden of proof is a presumption established to implement some public policy other than to facilitate the determination of the particular action in which the presumption is applied. A presumption affecting the burden of proof has the legal effect to impose upon the party against whom it operates, the burden of proof as to the non-existence of the presumed fact. A presumption affecting the burden of proof is much stronger and more difficult to overcome than a mere presumption affecting the burden of producing evidence.

Labor Code §4604.5 would be a presumption affecting the burden of proof. The key to whether a presumption is one affecting the burden of proof or producing evidencing evidence, is whether it is part of an effort to implement a public policy. In the case of Minniear vs. Mount San Antonio Community College (61 CCC 1055), dealing with the issues of whether the treating doctor presumption of Labor Code §4062.9 was a presumption affecting burden of proof or burden of producing evidence, the Appeals Board (en banc) indicated that the presumption of the treating physician was established to implement a public policy of reducing medical-legal costs and expediting the resolution of medically related issues by such means as restricting the number of medical-legal evaluations. Labor Code §4604.5 was implemented and intended to be a presumption affecting the burden of proof because it is part of a legislative effort to implement a public policy of reducing medical treatment costs and expediting the resolution of medical treatment issues before the Workers' Compensation Appeals Board. Based on the Minniear case, and Evidence Code Section 605, the presumption of Labor Code § 4604.5 would be held to be a presumption affecting the burden of proof.

2. A presumption affecting the burden of proof imposes upon the party against whom it operates the burden of proof as to the non-existence of the presumed facts. The presumption, however, is rebuttable and may be controverted by a

preponderance of evidence establishing that a variance from the guidelines is reasonably required to cure and relieve the employee from the effects of his or her injury.

As with the treating doctor presumption, the presumption of Labor Code Section 4062.9 would not be easy to overcome and the burden upon the physician would not be easily met.

The effect of section 4062.9 would be to place the burden of proof on the doctor or medical facility to prove by a preponderance of the evidence that a variance from the guideline is reasonably required to cure and relieve the employee from the effects of his or her injury.

In the Minniear case, the Appeals Board indicated that any contention that the presumption of the treating physician's findings had been rebutted by an allegedly more thorough qualified medical evaluator's report, requires reference to specific factors. These contentions should be made in the context of the elements described in Board Rule 10606. The presumption of 4604.5 would have a similar requirement. It would require that the treating physician give specific factors that would make the evaluator's reports sufficient to overcome the utilization guidelines. The Minniear case would require that the treating physician or medical facility prove by a preponderance of the evidence the non-existence of the presumed fact, that the utilization guidelines are correct as to the nature and scope of medical treatment and do this by citing specific factors, as to why the utilization guidelines would not be applicable.

As with the treating doctor presumption, this would not be an easy presumption to overcome and the burden upon the physician would not be easily met.

3. Labor Code §3202, which requires that Workers' Compensation Law shall liberally be construed by the Courts with the purpose of extending their benefits for the protections of persons injured in the course of their employment, would have no affect on the physician's burden of proof to overcome the presumption of Labor Code Section 4604.5. Labor Code §3202.5 states that nothing contained in Section 3202 shall be construed as relieving a party or a lien claimant from meeting the evidentiary burden of proof by a preponderance of the evidence. Labor Code §3202.5 would be controlling in rebutting the presumption under Labor Code §4604.5. The physician or medical facility would have to prove by a preponderance of the evidence the facts required to overcome the presumption. Preponderance of evidence is defined in the section as such evidence when weighed with the evidence opposed to it has more convincing force and greater probability of truth. When weighing the evidence, the test is not the relative number of witnesses, but the relative convincing force of the evidence. Labor Code §3202.5 would apply to the presumption of 4604.5 and would require the physician or lien claimant to overcome the utilization guidelines by a preponderance of medical evidence.

4. Labor Code §4604.5(d) provides that not withstanding the medical treatment utilization schedule, the guidelines set forth in the American College of Occupational Environmental Medical Practice Guidelines, for injuries occurring on or after January 1, 2004, an employee shall be entitled to no more than 24 chiropractic and 24 physical therapy visits per industrial injury. This section would provide that the limits of 24 chiropractic and 24 physical therapy visits would be the maximum, regardless of the utilization guidelines. This section overlaps as to chiropractic and physical therapy treatments of the utilization guidelines. However, it would not overlap for the many other treatments that occur in workers' compensation.

Workers' Compensation injuries are of many and unlimited types. Medical treatment in workers' compensation goes far beyond just chiropractic and physical therapy treatment. Utilization review would affect these various other types of treatment. Therefore the utilization guidelines and the restriction of Labor Code §4604.5(d) are not totally duplicative, but only partially. Chiropractic and physical therapy make up only one area of the many areas in which medical treatment is provided in workers' compensation cases.

5. Workers' compensation cases and all issues in workers' compensation are decided by a preponderance of evidence presented by the trial judge. Under the current system of workers' compensation, it is difficult for the defendants to present evidence on medical utilization issues. The treating doctor often has the presumption of correctness. It is presumed that the findings of the treating doctor are correct and the defendant must overcome that presumption by a preponderance of medical evidence. In addition, the doctor has the advantage of being able to come into court and by report testify as to why he provided the treatment and how it helped the injured worker. The defendant then must overcome not only the presumption, but also the evidence introduced by the doctor on utilization of medical treatment. It is very difficult at this time for the defendants on each individual case to introduce evidence to overcome both doctor's testimony and the presumption of correctness of the treating physician on the issue of nature and scope of medical treatment. In most cases, there is little or no evidence presented by the defendants to rebut the presumption of the treating doctor and the evidence introduced by the treating doctor. Labor Code §4062.9 would change that. It would reverse the presumption. It would provide that the utilization guidelines were presumed correct on the nature and scope of medical treatment. It would put the treating physician in the position of having to introduce evidence to overcome the utilization guidelines. The physician would have to overcome the presumption that the utilization guidelines are correct on the nature and scope of treatment by a preponderance of the evidence in the record. The doctor would have to, by introduction of specific factors, prove the non-existence of the presumed fact, i.e., that the utilization guidelines are correct. The effect of this would be to transfer the burden from the defendant (as is currently the situation), to the medical provider. The current system gives a big advantage to the treating physician, based on both the presumption and the ability to present evidence as to

why he provided the treatment. This advantage would be reversed by the utilization guidelines and the burden would now be on the physician to justify the treatment.

6. The physician or medical provider would have the burden of showing why the utilization guidelines should not be followed. Based on the fact that judges review all settlements, they would see numerous reports of each doctor. The judges would begin to see a pattern if a physician in every single case wanted to overcome the utilization guidelines. If a physician were regularly providing that the guidelines should not be followed, the Workers' Compensation Judge would be aware of this fact. In addition, the fraud provisions require the reporting of how often a physician was claiming that a particular injured worker's treatment be required to go beyond the utilization guidelines. The pressure would be on the doctors based upon the fraud provision and the fact judges see many of their medical reports to limit the number of times they claim the treatment should be beyond the utilization guidelines.

7. The utilization guidelines would not only reduce the amount of medical treatment provided but would also reduce the amount of temporary disability. The applicant is entitled to temporary disability during the period they are not permanent and stationary and cannot return to work. Currently with the treating physician's presumption of correctness and the medical evidence justifying treatment easily proved by the physician, temporary disability periods are difficult to end. With the implementation of the presumption of correctness of the utilization guidelines of Labor Code Section 4604.5 and the end to the presumption of correctness of the treating physician the period of active medical treatment would be reduced and therefore the amount of temporary disability awarded would also be reduced.

8. Over-utilization of medical treatment can be injurious to the injured worker. Over-utilization of medical treatment exposes the injured worker to unnecessary risk of harm. Many medical procedures have a risk attached to them and each time they are performed, the risk of a problem increases. When injured workers' are over treated they often suffer injuries as a result of the treatment. The over-utilization of medical treatment can lead to the injured worker not returning to work and losing his/her job. The utilization guidelines would protect the injured worker by not allowing treatment that could be injurious to them.

9. Judges must decide cases based on a preponderance of the evidence. Often today judges award medical treatment because of the presumption of correctness of the treating doctor and the evidence before them. They often feel this treatment is unreasonable and unnecessary, but they do not have any evidence to overcome the presumption and medical evidence. The utilization guidelines will give the judges the evidence to issue fair decisions on the nature and scope of medical treatment. Judges will apply the utilization guidelines unless there is a very good reason and sufficient evidence to support not applying the guidelines. Judges are in need of the utilization guidelines to help them in curbing unnecessary medical treatment.

10. Workers' Compensation Judges are in law enforcement and are not lawmakers. Workers' Compensation Judges have always applied the law as it is written. They are bound to apply that law as the legislature intended. Workers' Compensation Judges have never ignored laws or the statutes. Recently the legislature enacted Labor Code §3208.3 to clear up the area of abuse of psychiatric injuries. The workers' compensation judges have applied that section and it has solved the problem. The workers' compensation judge will apply the utilization review guidelines as written.

11. Labor Code section 4604.5 provides that the presumption is rebuttable and may be controverted by a preponderance of the evidence establishing that a variance from the guidelines is reasonably required to cure and relieve from the effects of the injury. The argument is being made that the presumption will easily be overcome because all that needs to be shown is that the treatment provided relief from the injury. The key to this section is the use of the terms cure "and" relieve not cure "or" relieve. This means that cure and relieve must be read together, that that the relief cannot be temporary but must be permanent relief from the injury. Since temporary relief will not be enough to overcome the presumption, the use of the term relief will in Labor Code Section 4604.5 will not make the presumption easy to overcome.

This analysis by Judge Kahn does not suggest that the impact of the guidelines on reducing over-utilization should be discounted against the impact of guidelines evaluated in other environments. This interpretation is consistent with the opinions expressed by Judge Joel Gomberg who was involved in drafting the legislative language and Chief Judge Steve Siemers who testified before the joint committee. Consequently, we do not reduce the estimates made in Step 3.

Step 5. How much of the impact of the utilization guidelines duplicates the impact estimated for the "hard caps" on physical therapy and chiropractic treatments?

The approach used by the WCIRB in their estimation of the impact of SB-228 was to treat that portion of medical treatment encompassed by chiropractic care (5.7%), physical therapy (4.0%), and physical medicine by MDs (1.3%) as separately covered by the chiropractic and physical therapy caps and essentially unaffected by the legislation on guidelines. I think this is the most reasonable approach. There are two competing effects, which likely offset each other and at least make more precise estimates difficult.

First, the studies cited above estimating over-utilization in workers' compensation medical treatment suggested that chiropractic treatment was a particular important factor in these estimates. To the extent that chiropractic and possibly physical therapy have proportionally more over-utilization than other areas, the estimates here would be too high.

On the other hand, to the extent that the guidelines adopted recommend more conservative treatment in many individual cases than the hard caps on chiropractic and physical therapy, then we are underestimating the impact by placing it at zero for these two areas.

Consequently, it seems appropriate to follow the WCIRB proposed methodology and reduce the overall portion of medical treatment subject to estimation by the portion of that treatment (11.8%) that is represented by physical medicine, chiropractic, and related cost-containment expense. For simplicity in exposition, we will retain the estimates from the previous step and reduce the system size estimates for medical expenses by 11.8% in the final step.

Step 6. How much does the estimate here duplicate impacts built into the impact of AB-749 on advisory rates?

The following analysis of the impact of the repeal PTP presumption on 2004 rates was prepared by Dave Bellusci of the WCIRB. A more complete analysis is available upon request from the Bureau.

Summary of Adjustment to Pure Premium Rates to Reflect AB 749 Repeal of Primary Treating Physician Repeal

In 2002, the WCIRB formed a special committee to evaluate the impact of AB 749, including the repeal of the PTP. The consensus of the Committee was that the presumption given to the primary treating physician was a significant factor in the sharply increasing medical trends over the last six years. While the Committee believed the changes in AB 749 related to the PTP were not likely to reduce the cost of medical below its current level, it was believed the changes should reduce the future rate of growth in medical costs. The WCIRB currently projects an annual on-level or excess medical loss ratio trend of approximately 8%. This on-level medical trend represents the growth in the average cost of medical losses in excess of (a) declining claim frequency, (b) changes in fee schedules, and (c) general medical inflation (for the non-fee-schedule-controlled component of medical losses).

While the Committee believed that the change in the primary treating physician presumption would reduce the rate of future medical inflation, there was no clear basis to develop a precise estimate. However, given (a) the magnitude of the differential between workers' compensation medical inflation and general medical inflation, (b) the impact of the presumption on historical workers' compensation medical inflation, and (c) the preliminary research of the University of California Survey Research Center, the Committee believed a 50% annual reduction in on-level (or excess) medical trend was a reasonable estimate of the impact.

In the WCIRB's original evaluation of AB 749 made in July of 2002, the repeal of the primary treating physician presumption was estimated by policy-year 2004 to reduce total costs from what they would otherwise have been by 3%, which corresponded to an approximate 5% reduction in medical costs. However, over the last year, medical costs have increased significantly. As a result, the pure premium rate impact for policy-year 2004 is

now estimated at 5%, which corresponds to an approximate 7% in reduction in medical costs. (By accident-year 2005 and 2006, medical costs are currently estimated to be reduced by 9% and 12%, respectively, from what they would have otherwise been due to the AB 749 repeal of the primary treating physician presumption.) At this time, there is no evidence available as to whether or not these estimated savings would materialize.

It is not precisely clear how to treat change in future medical growth trends when modifying estimates of over-utilization based on past studies. However, to remain consistent, it seems appropriate to treat the reductions as modifications to our baseline estimates of the portion of medical cost represented by over-utilization. In addition, since the implication of the PTP study is that majority of the impact was on over-utilization, the 7% figure should be taken directly against the over-utilization previously estimated. That is, we will reduce the original estimate of the portion of the differential in cost that is attributable to over-utilization by 7 percentage points, resulting in a midpoint estimate of 46.7% at step 2 rather than 50.4% (range 32.3% to 56.3%).

Adjusting for the intervening steps, we get an estimate of after Step 6: midpoint of 36.7% and a range of 16.2% to 53.4%.

Step 7: How much of the impact of the legislation will be lost during the initial start-up, including adoption and dissemination of the ACOEM and subsequent guidelines?
There are several aspects to consider. First, ACOEM guidelines have not been finalized and cannot be adopted for three months after publication. Second, ACOEM guidelines are not complete and will have to be supplemented with additional guidelines as adopted by the AD of the DWC. Third, even if the additional guidelines are adopted in a timely manner (no guarantee) they will still be incomplete in some areas.

It seems appropriate to exclude from consideration the calendar-year 2004 medical-treatment costs paid on 2004 claims, 10% of total incurred medical. Given the possibility of delays in adoption of additional guidelines and the likelihood that they will still be partially incomplete, it seems appropriate to exclude 30% of medical costs paid in the second year. This would be an additional 6% of 2004 incurred costs, since the WCIRB estimates that second calendar-year costs represent 20% of ultimate incurred medical. Finally, while guidelines will cover the most common and high-cost procedures, it is unlikely that guidelines will ever be complete. It seems appropriate to assume the 10% of all costs from the third calendar-year forward will remain outside of the guidelines, or .1*.7 = 7%.

Consequently, it is appropriate to reduce the estimated 2004 incurred amounts affected by the guidelines by 23% (10% + 6% + 7%).

Final Estimate
Starting with an estimated $13.8 billion for total incurred medical for 2004, we first exclude medical-legal (2.2%) and physical therapy, chiropractic and related cost-containment (11.8%). Then we eliminate the portion of the 2004 estimate that will be affected by other

provisions of SB-228 and AB-227 (outpatient fee schedule, –6.8%; 5% reduction in physician payments through 2006, -0.5%; savings on pharmaceuticals, -1.7%; and increase on inpatient costs, 0.9%). This leaves a total of $10.9 billion. Of this, we eliminate 23% that is estimated to remain outside the impact of guidelines for 2004, leaving $8.4 billion.

Applying our low-medium-high estimates of the impact of utilization guidelines, we get the following estimates:

Range	Total affected dollars	Impact of utilization guidelines	Total savings
Low	$8.4 billion	16.2%	$1.4 billion
Middle	$8.4 billion	36.7%	$3.1 billion
High	$8.4 billion	53.4%	$4.5 billion

Caveats

With any effort like this there are a number of caveats. First, a number of estimates are made based on research on similar but not identical systems, for example, other states' workers' compensation systems. California's system may react differently when subject to changes because all effects are the result of the interaction of a whole range of laws, regulations, and custom.

Second, when estimates are based on more distantly related systems, in type and/or time, then estimates should be subject to more scrutiny. The potential for estimates to be too high or too low increases. For example, group health may be more or less responsive to introduction of treatment guidelines and the over-utilization in group health, prior to the treatment guideline introduction, may have been higher or lower than experienced in today's workers' compensation system.

Third, as noted by many observers in ongoing discussions, the impact of the guidelines could be heavily affected by the administrative, judicial, and regulatory processes. Any of those three areas could lead to delays, more or less conservative guidelines, or more or less strict judicial interpretation.

However, it is still important to make the best possible estimate that we can to assist the parties and stakeholders in anticipating the impact of the legislation. The above estimate reflects the best estimate that I can currently make. Any recommendations for improvement will be gladly accepted and incorporated into the estimation process.

References

Baker, Laurence C. and Alan B. Krueger. "Twenty-four-hour coverage and workers' compensation insurance." Health Affairs, 12:271-281, 1993.

Baker, Laurence C. and Alan B. Krueger. "Medical costs in workers' compensation insurance." Health Economics, 14(1995):531-49.

Brook, R. H, and K. N. Williams, "Effect of medical care review on the use of injections: a study of the New Mexico Experimental Care Review Organization." Annals of Internal Medicine, 85: 509-15, 1976.

Durbin, David L., Dan Corro, and Nurhan Helvacian. "Workers' compensation medical expenditures: Price vs. Quantity." Journal of Risk and Insurance, v.63(1), March 1996:13-33.

Elam, Kenneth, Victoria Taylor, Marcia Ciol, Gary M. Franklin, and Richard A. Deyo, " Impact of a Workers' Compensation Practice Guideline on Lumbar Spine Fusion in Washington State." Medical Care, V. 35 (5): 417-424, 1997.

Fowkes, F.G., R.C. Evans, L.A. Williams, S.H. Gehlbach, B.R. Cooke, C.J. Roberts. "Implementation of guidelines for the use of skull radiographs in patients with head

Gama, R., P.G. Nightingale, and J.G. Ratcliffe. "Effect of educational feedback on clinicians' requesting of cardiac enzymes." Annals of Clinical Biochemistry, v.29:224-25, March 1992.

Grillo, Roberto and Jonathan Lomas. "Evaluating the Message: The Relationship Between Compliance Rate and the Subject of a Practice Guideline." Medical Care v.32(3) 202-213, 1994.

Grimshaw, Jeremy M. and Ian T. Russell. "Effect of Clinical Guidelines on Medical Practice: A Systematic Review of Rigorous Evaluations." Lancet, v. 342, 1317-1324, 1993.

Hopkins, J. A., W. C. Shoemaker, S. Greenfield, P. C. Chang, T. McAuliffe, R.W. Sproat. "Treatment of Surgical Emergencies with and Without an Algorithm. Archives of Surgery, 1980, v. 115: 745-50.
[patients requiring ventilation reduced from 33% to 14%]

Johnson, William G., John F. Burton Jr., Lisa Thornquist, and Brian Zaidman. "Why does workers' compensation pay more for health care?" Benefits Quarterly, 4th quarter, v.9(4), 1993.

Johnson, William G., Marjorie L. Baldwin, and John F. Burton, Jr. "Why is the treatment of work-related injuries so costly? New evidence from California." Inquiry 33:53-65, Spring 1996.

Linn, B.S. “Continuing Medical Education: Impact on Emergency Room Burn Care.” JAMA 1980, v. 244: 565-70.
[Early complications in patients admitted to study hospitals reduced from 45% to 30%.]

Lohr, K.N., and R. H. Brook, “Quality of care in episodes of respiratory illness among Medicaid patients in New Mexico.” Annals of Internal Medicine, 92:99-106, 1980.

Neuhauser, Frank. “Doctors and courts: Do legal decisions affect medical treatment practice?” Report to the Commission on Health and Safety and Workers’ Compensation, San Francisco, 2001a.

Neuhauser, Frank, Alex Swedlow, Laura Garnder, and Ed Edelstein. “Study of the Cost of Pharmaceuticals in Workers’ Compensation.” Report to the Commission on Health and Safety and Workers’ Compensation, San Francisco, 2001b.

Rosenberg, S. N., D.R. Allen, J. S. Handte, et. al. “Effect of utilization review in a fee-for-service health insurance plan. New England Journal of Medicine, 1995.

Thompson, R.S., H. L. Kirz, and R.A. Gold, “Changes in physician behavior and cost savings associated with organizational recommendations on the use of “routine” chest x-rays and multi-channel blood tests.” Preventive Medicine, v.12(3):385-96, May, 1983.

Wickizer T. “Controlling outpatient medical equipment costs through utilization management.” Medical Care 1995, 33:383.

Zaidman, Brian. *Report to the legislature on health care cost containment practices in Minnesota workers’ compensation*. Minnesota Department of Labor and Industry, 1990.

Durand-Zaleski, Isabelle, Francis Bonnet, Henri Rochant, Phillippee Bierling, and Francois Lemaire. “Usefulness of consensus conferences: the case of albumin.” Lancet, v.340:1388-90, 1992.

WCIRB, *WCIRB Bulletin No, 2003-12: Report on 2002 California Workers’ Compensation Losses and Expense*s. San Francisco, June 27, 2003.

WCRI, WC-02-02:*Benchmarks for Designing Workers' Compensation Medical Fee Schedules: 2001-2002.* Stacey Eccleston, Aniko Laszlo, Xiaoping Zhao, Michael Watson. Cambridge, July 2002.

WCRI, WC-03-04: *The Anatomy of Workers’ Compensation Medical Costs and Utilization: Trends and Interstate Comparisons, 1996-2000.* Stacey Eccleston and Xiaoping Zhao, with the assistance of Michael Watson. Cambridge, July 2003.